

## Claims

[c1] What Is Claimed Is:

1.A locking mechanism for an external optical disk drive with a cover and an upper housing, comprising:  
an elastic member, having two connecting ends;  
a rotary shaft, integrally formed with the cover and having a hole adapted to receive one of the connecting ends;  
a locking member, positioned on the upper housing; and  
a mounting member, positioned on the upper housing and adapted to fasten the other one of the connecting ends.

[c2] 2.The locking mechanism as claimed in claim 1, wherein the elastic member is of metallic material and can be a torsion spring.

[c3] 3.The locking mechanism as claimed in claim 1, wherein the elastic member is of plastic and can be a torsion spring.

[c4] 4.The locking mechanism as claimed in claim 1, further comprising a gear rack that is integrally formed with the rotary shaft of the cover.

- [c5] 5.The locking mechanism as claimed in claim 4, further comprising a spur gear that is positioned on the mounting member and is adapted to engage with the gear rack.
- [c6] 6.A locking mechanism for an external optical disk drive with a cover and an upper housing, comprising:
  - an elastic member, having two connecting ends;
  - a rotary shaft, integrally formed with the cover and having a hole adapted to receive one of the connecting ends;
  - a gear rack, integrally formed with the rotary shaft;
  - a mounting member, positioned on the upper housing and adapted to fasten the other one of the connecting ends;
  - a spur gear, positioned on the mounting member and adapted to engage with the gear rack; and
  - a locking member, positioned on the upper housing.
- [c7] 7.The locking member as claimed in claim 6, wherein the elastic member is of metallic material and can be a torsion spring.
- [c8] 8.The locking mechanism as claimed in claim 6, wherein the elastic member is of plastic and can be a torsion spring.
- [c9] 9.An external optical disk drive, comprising:

a lower housing;  
an upper housing, positioned at the lower housing;  
a locking member, positioned on the upper housing;  
an elastic member, having two connecting ends;  
a cover, having a rotary shaft and a gear rack and having a hole to be adapted to receive one of the connecting ends of the elastic member;  
a mounting member, positioned on the upper housing and adapted to fasten the other one of the connecting ends; and  
a spur gear, positioned at the mounting member;  
wherein the cover is opened or closed, the spur gear will engage with the gear rack of the cover.

- [c10] 10. The external optical disk drive as claimed in claim 9, wherein the elastic member is of metallic material and can be a torsion spring.
- [c11] 11. The external optical disk drive as claimed in claim 9, wherein the elastic member is of plastic and can be a torsion spring.